

October 3, 2003



Acquisition

Disclosure of Contractor Data
for the Development of Night
Vision and Display Systems
(D-2004-001)

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Acronyms

AFRL	Air Force Research Laboratory
IPNVG	Integrated Panoramic Night Vision Goggles
PNVG	Panoramic Night Vision Goggles
PRDA	Program Research and Development Announcement
SBIR	Small Business Innovative Research



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

October 3, 2003

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,
TECHNOLOGY, AND LOGISTICS
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE CONTRACT MANAGEMENT
AGENCY

SUBJECT: Report on Disclosure of Contractor Data for the Development of Night
Vision and Display Systems (Report No. D-2004-001)

We are providing this report for your information and use. We performed the audit in response to a request from Senator Richard Durbin. No written response to this report was required, and none was received. Therefore, we are publishing this report in final form.

We appreciate the courtesies extended to the staff. For additional information on this report, please contact Mr. Bruce A. Burton at (703) 604-9071 (DSN 664-9071) or Mr. Michael E. Simpson at (703) 604-8972 (DSN 664-8972). See Appendix C for the report distribution. The audit team members are listed inside the back cover.

A handwritten signature in cursive script, reading "Mary L. Ugone", is positioned above the printed name.

Mary L. Ugone
Acting Director
Acquisition Management Directorate

Office of the Inspector General of the Department of Defense

Report No. D-2004-001

(Project No. D2003AB-0054)

October 3, 2003

Disclosure of Contractor Data for the Development of Night Vision and Display Systems

Executive Summary

Who Should Read This Report and Why? Civil service and military managers with oversight responsibility for contracts awarded under the Small Business Innovative Research Program and personnel involved with technical data rights should read this report. The report discusses the Small Business Innovative Research contracting process as well as roles and responsibilities relating to technical data rights.

Background. In November 2002, Night Vision Corporation sent a letter to Senator Richard Durbin with two concerns. The first concern was whether the Air Force unlawfully passed Night Vision Corporation's technology to Insight Technology and subsequently awarded Insight Technology a manufacturing contract for night vision goggles. The second concern was whether Insight Technology violated its nondisclosure agreement while working as a subcontractor to Night Vision Corporation. Senator Durbin requested that we review these concerns. This report addresses the first concern. We did not address the second concern because this issue is a contract dispute between the two contractors that does not involve the Government. Additionally, in the event that the dispute between the two contractors resulted in litigation, the appropriate forum for resolution would be through the judicial process, not with the Department of Defense.

Results. The audit did not substantiate Night Vision Corporation's concern that the Air Force Research Laboratory improperly released any data from its Small Business Innovative Research contract. The Air Force Research Laboratory allowed contractors, wanting to submit proposals to the Program Research and Development Announcement solicitation, the opportunity to review military specifications, military standards, technical reports, and hardware. However, contractors were not permitted to review any detailed technical drawings or proprietary data developed under the Small Business Innovative Research Program. Hardware delivered under the Small Business Innovative Research Program Phase II was made available by the Air Force for any contractor to examine if permission was requested. Night Vision Corporation acknowledged that it had no evidence or documentation to show that the Air Force conveyed any technical data to Insight Technology.

Management Comments. We provided a draft of this report on June 23, 2003. No written response to this report was required, and none was received. Therefore, we are publishing this report in final form.

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Background

The audit was performed in response to a congressional request concerning the improper disclosure of data pertaining to the development of night vision goggles and display systems.

Small Business Innovative Research Program. The Small Business Administration Office administers the Small Business Innovative Research (SBIR) Program. The SBIR provides the funding for the critical startup and development stages of innovative research activities while encouraging the commercialization of technology, products, or services. Agencies make SBIR awards based on small business qualifications, degree of innovation, technical merit, and future market potential. Small businesses that initially receive awards or grants are eligible for two additional SBIR phases. A contractor that receives Phase I funding is not guaranteed to receive either a Phase II or Phase III award. Phase I is the startup phase where awards are made up to \$100,000 to support exploration of the technical merit or feasibility of an idea or technology. Phase II awards are made for up to \$750,000 to expand Phase I results. During this time the research and development work is performed and the developer evaluates commercialization potential. Only Phase I awardees are considered for Phase II. Phase III awards consist of moving the innovation into the marketplace. The small business must find funding in the private sector or other non-SBIR Federal agency funding.

Air Force Research Laboratory. The Air Force Research Laboratory's (AFRL) headquarters is located at Wright Patterson Air Force Base in Dayton, Ohio. The goal of AFRL is to create a more efficient, effective organization to support the Air Force's global engagement vision. The AFRL mission is to discover, integrate, and deliver affordable technologies for improved warfighting by leading a partnership of Government, industry, and academia. Overall, the lab is responsible for planning basic research to ensure continued technological superiority, and developing and transitioning new technologies for Air Force weapon systems and their supporting infrastructure.

Night Vision Goggle Program. In May 1995, the Air Force awarded Night Vision Corporation a Phase I SBIR contract to develop Panoramic Night Vision Goggles (PNVG). During this phase, a demonstrator was developed that provided a significantly improved field of view. The demonstrator used tube assemblies with folded optics and a remote power supply. Because of the achievement of Phase I, a Phase II contract was awarded in July 1996 to further develop two models of the goggle: a model for aircraft that might require ejection (PNVG I) and a model for non-ejection aircraft and ground personnel (PNVG II).

Program Research and Development Announcement. A Program Research and Development Announcement (PRDA) is a method of soliciting proposals for research and development, when the area of interest is more specialized but still has general application and is associated with the needs of a program or programs. In April 2000, Insight Technology was awarded a PRDA contract for Integrated Panoramic Night Vision Goggles (IPNVG). The contract was for the design and manufacturing of 55 IPNVG systems for the Air Force and Army.

The IPNVG system incorporates filmless and thin-film, low halo, high-fill-factor image intensifier tubes with straight through channels. The IPNVG manufacturing was simplified and the design affords increased interchangeability of parts and facilitates easier maintenance than earlier versions of night vision goggles.

Criteria

Air Force Military Command Policy Directive 61-1. Directive 61-1 for SBIR and Small Business Technology Transfer Programs, dated February 5, 2001, designates the AFRL as the office of primary responsibility for the Air Force SBIR Program. The Air Force SBIR Program objectives are to stimulate technological innovation, strengthen the role of small businesses to meet Federal research and development needs, foster and encourage participation by minorities and disadvantaged persons in technological innovation, and increase the commercial application of federally supported research.

Small Business Innovative Research Program Policy Directive. The SBIR Policy Directive, dated September 24, 2002, discusses contractor technical data and data rights and provides for retention of rights in data for 4 years from the end of any SBIR phase. The SBIR Policy Directive defines SBIR technical data as all data generated during the performance of an SBIR award. SBIR technical data rights are the rights that the small business concern obtains in data generated during the performance of any SBIR phase award in which the Government receives a license.

According to officials at the Small Business Administration, the small business that is awarded the contract under the SBIR Program owns the technical data rights because of its contract with the Government. Also, the SBA officials considered any drawing, including those submitted by a subcontractor, to be the property of the small business under contract.

Objectives

The overall audit objective was to evaluate whether the AFRL, Wright-Patterson Air Force Base, improperly disclosed proprietary technical data from SBIR contracts for the development of night vision and display systems. See Appendix A for a discussion of the scope and methodology as well as for prior coverage related to the objectives.

Disclosure of Contractor Data by the Air Force Research Laboratory

No evidence to support the allegation that the Air Force Research Laboratory (AFRL) released data developed by Night Vision Corporation during Phase II of the SBIR Program, could be found. Because of dissention among the prime contractor and the subcontractor during phases of the SBIR Program, the AFRL felt it was in the best interest of the Government to issue a Program Research and Development Announcement (PRDA) to explore enhancements to the PNVG Program. The allegation, submitted as part of a congressional request concerning the improper release of technical data by AFRL, was not substantiated.

Release of Technical Data

Allegation. AFRL personnel improperly disclosed proprietary technical data from a Small Business Innovative Research contract for the development of night vision and display systems with Night Vision Corporation to another contractor, Insight Technology.

Audit Results. We did not substantiate the allegation that the Air Force improperly released contractor data. Based on our review, the Air Force released no contractor data belonging to Night Vision Corporation to Insight Technology. The AFRL established a Technical Document Center where contractors interested in submitting proposals to the PRDA solicitation had the opportunity to review military specifications, military standards, technical reports, and hardware. However, contractors were not permitted to review any detailed technical drawings or proprietary data developed under the SBIR Program. Hardware delivered under SBIR Phase II was made available by the Air Force for any contractor to examine upon request. Night Vision Corporation acknowledged that it had no evidence or documentation to show that the Air Force conveyed any technical data to Insight Technology.

Although Night Vision Corporation believed that a Phase III contract should have been awarded to them to produce the goggles they developed, AFRL believed that the deterioration of relationships between the Night Vision Corporation and its subcontractors posed an unacceptable risk. The AFRL also wanted to further advance panoramic night vision technology by issuing a new research announcement.

Contractor Relationship. Night Vision Corporation is a small company with only a few employees and limited manufacturing capabilities. A significant amount of the work under Phase II consisted of subcontract work with other firms. Night Vision Corporation subcontracted with Insight Technology for the design and development of the housings and coverings for the monoculars of the binocular assembly for the ejection-safe goggles. Insight Technology is a small business, with approximately 200 employees and facilities and equipment capable of producing night vision goggles.

During the performance of Phase II work, disputes arose between Night Vision Corporation and Insight Technology concerning ownership of technical data rights for parts of the developed goggles. Because of the dissension among the contractors over the ownership of the technical data and the deterioration of their working relationship, the Air Force was concerned about the stability of the teaming arrangement. The Air Force decided that it was in the best interest of the Government to solicit contractors to explore options for enhancing PNVG to ensure successful continuance of the night vision goggle program.

Advanced Technology. The Air Force issued a PRDA to discover the potential for enhancements to PNVG. As a result of the PRDA solicitation, Insight Technology proposed IPNVG, which consisted of a binocular assembly comprised of two monocular assemblies, each with an inner and outer channel. The Air Force found the Insight Technology technical approach to be responsive and acceptable for award. Night Vision Corporation submitted a proposal to a PRDA; however, the Air Force concluded that the Night Vision Corporation's overall proposal was weak and did not address many of the technical areas necessary to fully detail the approach to the issues set forth in PRDA. Also, Night Vision Corporation's proposal did not identify the majority of the program team, and there was no supporting documentation from any of the subcontractors showing cost or commitment to perform.

According to documentation compiled by AFRL, the new IPNVG includes new enhancements. All optical elements and the image intensifier tube assemblies in both the inner and outer channels are identical. The IPNVG incorporates filmless and thin-film, low halo, high-fill-factor, 16mm image intensifier tubes with straight through channels. The IPNVG also has an integral wraparound power supply housed in the image intensifier tube itself that is insulated for protection against environmental elements. The IPNVG design affords interchangeability of the image intensifier tubes and facilitates easy maintenance of goggles.

Engineers from the Technical Assessment Division, Office of the Deputy Inspector General for Auditing, analyzed the non-ejection goggle proposed and developed under Night Vision Corporation's SBIR Phase II contract and compared it to the goggle proposed by Insight Technology under the PRDA. Night Vision Corporation's non-ejection goggle was the subject of the allegation of improper technical data transfer. The engineers' assessment concluded that the Insight Technology goggle, as previously described, was significantly different from Night Vision Corporation's goggle developed under the SBIR Phase II contract. Because of the sensitive nature of the information in the technical assessment, we have not included the assessment as an appendix in this report. The results of the assessment are available upon request.

Appendix A. Scope and Methodology

We performed the audit to determine whether the allegation we received from Senator Durbin in December 2002 had merit. We discussed the allegation with the staff at the offices of the Small Business Administration, AFRL, Night Vision Corporation, and Insight Technology.

We performed this audit from January 2003 through June 2003 in accordance with generally accepted government auditing standards. The audit scope was limited to the allegation of the Air Force disclosing proprietary technical data. We did not address a second Night Vision Corporation concern that one of its subcontractors violated a nondisclosure agreement between the two contractors because this issue is a contract dispute between the two contractors that does not involve the Government. Additionally, in the event that the dispute between the two contractors resulted in litigation, the appropriate forum for resolution would be through the judicial process, not with the Department of Defense. We also did not review the management control program because this was not an announced objective.

We identified, analyzed, and documented applicable laws, and regulations for SBIR technical data rights. We reviewed contracts from 1995 through 2002. We also reviewed SBIR contracts for both fixed wing ejection and rotary wing non-ejection of PNVG. We also reviewed the contracts for the fixed wing ejection and rotary wing non-ejection IPNVG. We also examined both fixed wing ejection and rotary wing non-ejection goggles. We interviewed officials at the Small Business Administration and AFRL, and also contractor personnel.

Use of Computer-Processed Data. We did not rely on computer-processed data to perform this audit.

Use of Technical Assistance. We received technical support from the Office of the Deputy Inspector General for Auditing, Technical Assessment Division in determining the degree of difference in the PNVG goggle developed by Night Vision Corporation and the IPNVG goggle that was manufactured under the PRDA by Insight Technology.

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of DoD Weapons System Acquisition.

Prior Coverage

No prior coverage has been identified on the release of proprietary technical data for PNVG by the AFRL from the General Accounting Office, the Office of the Inspector General of the Department of Defense, or the Air Force Audit Agency during the last 5 years.

Appendix B. Congressional Request

COMMITTEE ON APPROPRIATIONS		TTY (202) 224-8180
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		701 NORTH COURT STREET
		MARION, IL 62959
		(618) 998-8612
		www.senate.gov/~durbin

United States Senate
Washington, DC 20510-1504

The Department of Defense Inspector General
ATTN: Mr Jose Schmitz
400 Army Navy Drive
Arlington, Virginia 20202

Dear Mr. Schmitz:

I am writing to request your office investigate a matter brought to my attention by an Illinois based company, Night Vision Corporation (NVC). The company is concerned that its technology may have been transferred by the Air Force to another competing company, Insight. I have enclosed a copy of their correspondence for your immediate attention and action if warranted.

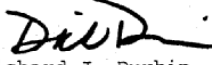
My constituent's concerns are two-fold:

Did the Air Force "unlawfully" pass NVC technology to Insight and subsequently award them the manufacturing contract for Panoramic Night Vision Goggles?

Did Insight violate its nondisclosure agreement with NVC?

Your investigation of this matter would be greatly appreciated. If you have any questions, you may contact Hurmayonne Morgan or Richard Purcell in my office at (202) 224-2152.

Thank you in advance and I look forward to your response.

Sincerely,

Richard J. Durbin
United States Senate

Appendix C. Report Distribution

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Under Secretary of Defense for Acquisition, Technology, and Logistics
Under Secretary of Defense (Comptroller)/Chief Financial Officer
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Other Defense Organization

Director, Defense Contract Management Agency

Non-Defense Federal Organization

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform
House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform
House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

Team Members

The Acquisition Management Directorate, Office of the Deputy Inspector General for Auditing of the Department of Defense prepared this report. Personnel of the Office of the Inspector General of the Department of Defense who contributed to the report are listed below.

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